

Notice of Allowability

Application No.

10/642,278

Applicant(s)

ERBAN, CHRISTOF

Examiner

Alan Diamond

Art Unit

1753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the after-final amendment filed October 15, 2004.

2. ☒ The allowed claim(s) is/are 1-21.

3. ☒ The drawings filed on 18 August 2003 are accepted by the Examiner.

4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☒ All b) ☐ Some* c) ☐ None of the:

1. ☒ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.

(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 10212004.

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Richard Treanor on October 21, 2004.

The application has been amended as follows:

In The Claims

In claim 1, bridging lines 4 and 5, please delete "signals, which depend on the incident light, on" and insert in its place --signals from--.

In claim 1, at line 5, after "two" please insert --of the--.

In claim 1, at line 5, after "cells" please insert --which are--.

In claim 1, at line 6, please delete "cells;" and insert in its place --cells, said measurement signals depending on the incident light on the at least two solar cells;--.

In claim 20, at line 2, please delete "substantially" and insert in its place --approximately--.

2. The following is an examiner's statement of reasons for allowance: Takehara et al (U.S. 5,669,987) does not teach or suggest the claimed subject matter in instant claims 1, 6, and 11 because Takehara et al compares voltages or currents of each string (11,12,13,14). While it is true that each string may have series connected solar cells, it is noted that the strings are connected in parallel, not series (see Figures 1, 3, 5,

7, and 9). Instant claims 1, 6, and 11 require that the at least two solar cells defined as detection cells are from a plurality of solar cells connected in series. Thus, Takehara et al differs from the instant claims since Takehara et al compares parallel connected strings, whereas the instant claims compare series connected solar cells.

Note that instant claim 12 requires that the at least two solar cells serving as sensors are not integrated into the series circuit. Takehara et al shuts down a string if an abnormality is found in the string, i.e., in the series connected solar cells of the string, not outside of the string. Takehara et al's detection cells for a string are the entire string itself. In order to meet the limitations of claim 12, Takehara et al would have to shut down one string on the basis of comparing the measurements of at least two of the other strings. Takehara et al simply does not teach or suggest doing this.

Matsushita et al (U.S. 6,653,459) no longer constitutes prior art because the certified copy of the instant German foreign priority document has been received by the Office, and the certified English translation (filed July 22, 2004) of said German foreign priority document fully supports the instant claims. Accordingly, the instant claims are afforded a foreign priority date of February 17, 2001, whereas Matsushita et al has a later U.S. filing date of June 29, 2001.

U.S. Patents 3,869,368, 4,328,456, and 4,494,063 are hereby made of record. Also made of record are JP 59-225415, DE 3335520, JP 60-179811, and Derwent Abstract No. 1995-029522. Most of these references are typical of the prior art and compare the output signal of a solar cell or module with a pre-set or threshold value, rather than taking the difference between signals and comparing the difference with a

threshold value. Said Derwent Abstract does use a difference in current, but does not teach or suggest the claimed invention. Note, for example, that (13) and (14) in said Derwent Abstract are in parallel.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan Diamond whose telephone number is 571-272-1338. The examiner can normally be reached on Monday through Friday, 5:30 a.m. to 2:00 p.m. ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alan Diamond
Primary Examiner
Art Unit 1753



Alan Diamond
October 21, 2004